Version with Markings to Show Changes Made

~~Abstract~~ABSTRACT

A syringe-type cell handling device for storing and subsequently transplanting, into a living body, ~~The main objects of the present invention, which relate to regenerative medical treatments, are to enable (i) storage and conveyance of harvested or cultured cells without contamination occuring (ii) simple injection of the cells into a living body. To achieve these objects,~~ cells harvested from a living body~~,~~ or cells obtained by culturing harvested cells~~, are stored in a syringe-type storage vessel and subsequently transplanted into a living body~~. The syringe-type cell handling device includes a vessel having a closed mouth and being at least partially composed of a main body, and a plunger that is slidably insertable into the main body such that the handling medium can be transplanted into a living body by applying a pushing force to the plunger. At least a part of the device that contacts the fluid handling medium, when the vessel holds the handling medium, is a gas permeable region for passing a quantity of gas necessary for survival of the cells. It is preferable that at least a part of the storage vessel inner wall in contact with the cells is formed from a cell non-adhesive material. ~~Besides enabling cells in the vessel to take in the oxygen they require to survive, the present invention also enables quick and easy transplantation of cells into a living body without a cell detachment process, because cells are prevented from adhering to the inside of the vessel. Further, it is preferable that a stored tissue regeneration composition contains cell culture microcarriers floating in a fluidity medium, and that the cell~~

~~culture microcarriers are composed of a bioabsorbable material and have cells adhering to their surfaces. Using this kind of tissue regeneration composition, a regenerative treatment can be carried out satisfactorily by simply and quickly transplanting cells from the syringe-type cell storage vessel into a living body without intricate scaffold-related procedures being required.~~